

SWR-0056

IN THE CLAIMS**Please cancel claims 1-14 without prejudice.****Please amend claim 15 as presented below in rewritten "clean" format:**

15. (amended twice) A neutron absorption device, comprising:
an inorganic base material; and
a layer disposed at said inorganic base material, said layer being composed of an element having a high neutron capture cross-section of more than 20% by volume and an electrolytically precipitable metallic element.

Please add the following new claims 16-25 as presented below:

16. (new) The neutron adsorption device of claim 15, wherein said element having said high neutron capture cross-section is an electrically conductive compound.

17. (new) The neutron adsorption device of claim 16, wherein said electrically conductive compound is a metallic compound.

18. (new) The neutron adsorption device of claim 17, wherein said electrically conductive compound is a metal boride.

19. (new) The neutron adsorption device of claim 15, wherein said element having said high neutron capture cross-section is in the form of an isotope having an augmented neutron capture cross-section.

^A
B¹⁰ or B¹¹

20. (new) The neutron adsorption device of claim 15, wherein said element having said high neutron capture cross-section is an element selected from the group consisting of boron, gadolinium, cadmium, samarium, europium, and dysprosium.

SWR-0056

21. (new) The neutron adsorption device of claim 15, wherein said electrolytically precipitable metallic element is an element selected from the group consisting of nickel, cadmium, and copper.

22. (new) The neutron adsorption device of claim 15, wherein a thickness of said layer is up to 800 micrometers.

23. (new) The neutron adsorption device of claim 15, wherein said element having said high neutron capture cross-section is embedded in a metal matrix.

24. (new) The neutron adsorption device of claim 23, wherein a concentration of said element having said high neutron capture cross-section embedded in said metal matrix is up to about 60%.

BY VOLUME

25. (new) The neutron adsorption device of claim 15, wherein said inorganic base material comprises a shielding element having a predefined surface.

APPLIES TO
NICKEL
ONLY